CorDEX

CONNECT

# INSTRUCTIONS FOR SAFE USE

## TOUGHPIX II
EXPLOSION PROOF
DIGITAL CAMERA

RUGGED AUTHORITY

www.cord-ex.com

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# READ THIS FIRST

The ToughPIX II 2410 range of flame-proof digital cameras are suitable for use in hazardous areas (Ex zones: potentially explosive environments).

Read and understand all Warnings and Cautions before using this product.

### Liability

The technical specification of the camera complies with relevant European Ex standards (EN 60079-0 and EN60079-1).

The user is solely responsible for ensuring the equipment is suitable for the intended purpose and environments.

CorDEX Instruments will not be liable for any injury or damage resulting from unauthorized adjustments to, or dismantling of, the camera or for use with inappropriate applications or environments.

### Trademark Information

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation. Pentium® is a registered trademark of Intel Corporation.

Macintosh is a trademark of Apple Computer, Inc. SD™ is a trademark.

Other names and products may be trademarks or registered trademarks of their respective owners.

### Product Information

Product design and specifications are subject to change without notice. This includes primary specifications, software, software drivers, and user's manual. The User Manual is a general reference guide for the product.

The manufacturer assumes no liability for any errors or discrepancies in the user manual.

# INSTRUCTIONS FOR SAFE USE

**As defined by clause 29.2(i) of EN60079-0**

The conditions referenced in this section relate specifically to hazardous area applications and must be followed.

In accordance with clause 5.1 of EN 60079-1, the critical dimensions of the flamepaths are:

| Flamepath | Maximum Gap (mm) | Minimum L (mm) |
|---|---|---|
| Rear carriage/front carriage | 0.04 | 6.5 |
| Flash Window/front carriage | 0.1 | 13.8 |
| LCD Window/ front carriage | 0.1 | 13.8 |
| Lens window/ front carriage | 0.1 | 13.8 |
| Operating rod/rear and | 0.1 | 10.5 |

- Contact the manufacturer for information on the dimensions of the flameproof joints.
- The apparatus must only be used in areas where there is low risk of impact.
- Do not charge battery pack in the hazardous area.
- The battery must be removed from the camera and charged in the CorDEX Instruments ToughPIX II charging bay. Using a different charging device can cause damage and void certification.
- The ToughPIX II 2410 Series digital camera incorporates a protected battery system with a non-replaceable fuse. This fuse is only to be replaced by CorDEX Instruments or a CorDEX Instruments Approved Repair Facility. Failure to do so will void the certification.
- Ensure that the ToughPIX II 2410 Series digital camera battery pack is secured using the plug provided. If the plug is lost, only replace with a plug of the correct size and type. If in doubt, contact your nearest CorDEX Instruments representative.
- The ToughPIX II 2410 Series digital camera is manufactured from aluminium alloy; and must contain less than 7% magnesium by weight and incorporates toughened glass windows. This should be taken into account when considering the end use application.
- The ToughPIX II 2410 Series digital camera cannot be maintained in the field and must be returned to the manufacturer should repair or maintenance be required.
- USB communications with the ToughPIX II 2410 Series digital camera must only occur within the non-hazardous area.
- When replacing the battery pack, the screw must be re-tightened to a torque of 1.5-4Nm and the cover cap replaced.
- Only CorDEX battery pack CDX2400-011 shall be used.

# LABELLING

CorDEX Instruments Ltd. 1 Owens Rd, Middlesbrough, TS6 6HE, UK

TP2410 – Explosion Proof Digital Camera

II 2 G

Ex d IIB+H2 T6 GbTamb -20°C to +50°C
ATEX –TRAC13ATEX0046X
IECEx :IECEx TRC 13.0016X
Serial Number- XXXX-XX-XXXX
Year of Construction- YYYY

CE 0518

Powered by – Refer to Manual

DO NOT OPEN WHEN EXPLOSIVE ATMOSPHERE PRESENT

# OPERATIONAL CAUTIONS

The cautions contained in this section do not relate specifically to safe use in hazardous area applications but should be followed to help prevent damage to the device or personnel.

- Keep out of reach of children
- The TP2410 is a precision instrument. Do not drop it, strike it or use excessive force when handling

**Maintenance**

For safety critical maintenance, please refer to EN60079-17

# CERTIFICATION

TRaC
testing regulatory and compliance

1 **EC TYPE EXAMINATION CERTIFICATE**

2 Equipment or protective system intended for use in potentially explosive atmospheres – Directive 94/9/EC – Annex III

3 EC Type Examination Certificate No.: **TRAC13ATEX0046X**

4 Equipment: **CorDEX Ex d Camera, ToughPIX II TP2410**

5 Manufacturer: **CorDEX Instruments Ltd.,**

6 Address: **Unit 1 Owens Road, Skippers Lane Industrial Estate, Middlesbrough, Cleveland, TS6 6HE, United Kingdom**

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 TRaC Global Ltd, Notified Body number 0891 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment or protective system intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in the confidential report **TRA-014451-33-00A**.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in section 18 of the schedule to this certificate, has been assured by compliance with:
**EN60079-0:2012** **EN60079-1:2007**

10 If the sign "X" is placed after the certificate number then this indicates that the equipment or protective system is subject to special conditions of safe use specified in the schedule to this certificate.

11 This EC-Type Examination certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of this equipment or protective system shall include the following:
Ex **Ex d IIB+$H_2$ T6 Gb -20°C ≤ Tamb ≤ 50°C**

This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the TRaC Ex Certification Scheme.

S.P. Winsor

S P Winsor, Certification Officer

Issue date: 2013-11-28

Copy No.: 1e

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Form RF355 is16A

NORTH WEST
Unit 1, Pendle Place, Skelmersdale, West Lancashire, WN8 9PN UK.
T +44 (0)1695 556666 F +44 (0)1695 557077 E test@tracglobal.com
www.tracglobal.com

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx TRC 13.0016X issue No.:0

Certificate history:

Status: Current

Date of Issue: 2013-11-28 Page 1 of 3

Applicant: **CorDEX Instruments Ltd**
Unit 1 Owens Road,
Skippers Lane Industrial Estate,
Middlesbrough,
Cleveland,
TS6 6HE
**United Kingdom**

Electrical Apparatus: **CorDEX Ex d Camera, ToughPIX II TP2410**
*Optional accessory:*

Type of Protection: **Flameproof**

Marking: Ex d IIB+$H_2$ T6 Gb -20°C ≤ Tamb ≤ 50°C

*Approved for issue on behalf of the IECEx Certification Body:* Stephen Winsor

*Position:* Certification Officer

*Signature: (for printed version)* S.P. Winsor

*Date:* 2013-11-28

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

TRaC Global Ltd.
Unit 1 Pendle Place
Skelmersdale
West Lancashire
WN8 9PN
United Kingdom

# EC DECLARATION OF CONFORMITY

CorDEX

CorDEX Instruments Ltd
Unit 1, Owens Road
Skippers Lane Industrial Estate,
MIDDLESBROUGH,
TS6 6HE

Declaration No. SO/11 Rev 3

**EC Declaration of Conformity**
**in accordance with EEC ATEX Directive 94/9/EC**

We,

**CorDEX Instruments Ltd.**

Hereby declare that the products described below

Product: Explosion-proof digital camera
Model: TP2410XP

are in conformity with the essential health and safety requirements of Council Directive 94/9/EC relating to equipment intended for use in potentially explosive atmospheres (ATEX Directive) Ex II 2 G, Ex d IIB+H2 T6 Gb(Tamb -20°C to +50°C) equipment, by the application of the following Standards:-

| | |
|---|---|
| BS EN 60079-0:2012 | Explosive atmospheres - Equipment. General requirements |
| BS EN 60079-1:2007 | Explosive atmospheres. Equipment protection by flameproof enclosures "d" |

as certified by Notified Body Number 0891 TRaC Global Ltd, UK by EC-Type Examination Certificate: TRAC13ATEX0046X and IECEx Certificate: IECEx TRC 13.0016X and are subject to the procedure set out in Annex VII of Directive 94/9/EC and these procedures are in conformity with the requirements of EN 80079-34 under the supervision of Notified Body Number 0518, SIRA Certification Service, Rake Lane, Eccleston, Chester, CH4 9JN, England.

It is ensured through internal measures that the products conform at all times to the requirements of the current EEC Directives and relevant standards.

Signature: _____ Authorised Person

Position: Director on behalf of CorDEX Instruments Ltd

Date: 07/10/2014

Product Serial number

Better:Better_Work:CorDEX:03_CorDEX_Products:CorDEX_Products_ToughPIXII:CorDEX_Products_ToughPIXII_ECDeclaration:EC Declaration of Conformity (TP2410XP)Rev A.docx

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